Resiliency is a Wicked Problem

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Abstract—Decision makers charged with improving resiliency in their local, regional, or national contexts are facing an extremely complex or wicked problem. The term "wicked problem" is used to describe and characterize social planning problems that are openended, contradictory, and have many stakeholders (each with unique and often differing perspectives on the problem). For over half a century, systems researchers have been working on developing formal approaches to help solve complex problems. Different systems paradigms have emerged over the years, and these are often labeled 'hard', 'soft' and 'critical'. Hard systems (like system dynamics, system analysis, and system engineering) try to deal with multiple interacting variables, but they assume that the problem can definitively defined (usually by an "expert" practitioner) and that optimal solutions can be achieved. To better handle wicked problems, soft systems methods (SSM) were developed that rely more on qualitative methods and a constructivist approach (i.e., appreciating that we inter-subjectively construct our social realities). SSM focuses heavily on participation by all stakeholders to formulate the problem from multiple perspectives and to develop systemic intervention strategies. Critical systems methods build on SSM by including methods that specifically address situations where there are conflicts among stakeholders and where some stakeholders hold an inordinate amount of power. This presentation will summarize soft and critical systems approaches and how they can be used to address resiliency as a wicked problem.

Keywords—wicked problem; soft systems methodology (SSM); critical systems thinking (CST); resilience

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